## COMPOSITE HYDROGEN ION EXCHANGE MEMBRANE HAVING SEPARATION CAPACITY, COMPOSITE SOLUTION, ITS PRODUCTION METHOD, AND FUEL **CELL CONTAINING IT**

Patent number:

JP2003175340

**Publication date:** 

2003-06-24

**Inventor:** 

WON JONGOK: KANG YOUN SU; O IN FAN; HA FUN

YON; CHO SAN UKU; CHOUN JEE WON; JON BUMU

SOKU

**Applicant:** 

KOREA INST OF SCIENCE & TECHNOLOGY

Classification:

- international:

B01J47/12; B01D69/12; B01D71/28; B01D71/32; B01D71/80; B01J39/20; H01B1/06; H01M4/86;

H01M8/02; H01M8/10

- european:

Application number: JP20020256633 20020902

Priority number(s):

Report a data error he

Also published as:

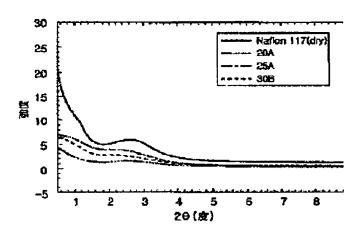
EP1289043 (A1)

US2003054219 (A

## Abstract of JP2003175340

PROBLEM TO BE SOLVED: To provide a composite hydrogen ion exchange membrane having a separation capacity, a composite solution, its production method, and a fuel cell containing the same.

SOLUTION: The composite ion exchange membrane has a structure in which a barrier substance being clay or an organically modified clay is dispersed in an ionically conductive polymer film. Such a composite ion exchange membrane is not markedly deteriorated in hydrogen ion diffusion though it selectively interrupts methanol. Further, it is advantageous in cost. The membrane can therefore be usefully used in a direct methanol fuel cell in which the fuel is methanol.



Data supplied from the esp@cenet database - Patent Abstracts of Japan

**Cast Available Copy**